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**DISTRIBUTED GAMING SYSTEM**

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(57) A distributed gaming system is provided, which is accessible by a user operating a personal computer 11 having a communications device such as a modem for communication with the internet 29 and giving the user of the terminal 11 access to a gaming system.

The gaming system comprises at least two components. i) a management system and ii) a casino system. The management system provides a gaming system web site that the user can access via the internet and which provides information about the gaming system and a directory of the games and casinos available on the system. Access to the management system server is via a proxy server which is linked to the management system server via a private communication network 32 with a secure access path 14. The proxy server is accessible from the internet and provides security functions for the gaming system effectively providing a "fire wall" between the user and the management system and between the user and the casino servers of the gaming system.

## **CLAIM**

1. A distributed gaming system, including a user terminal at a first location, a management server at a second location, at least one casino system at a third location, a public communication system enabling connection of the user terminal to the management server and a private communications system enabling connection of the management system and the casino system wherein the management server is arranged to register a user of the user terminal, establish a player account, enable the deposit of funds into the player account, manage the transfer of funds between the player account and the casino and to offer the user a selection of games or casino systems to be played from the user terminal.

**AUSTRALIA**  
**Patents Act 1990**

**ARISTOCRAT LEISURE INDUSTRIES PTY LTD**

**ORIGINAL**

**COMPLETE SPECIFICATION  
STANDARD PATENT**

*ntion Title:*

*Distributed gaming system*

the following statement is a full description of this invention including  
best method of performing it known to us:-

## *Distributed gaming system*

### **Introduction**

The present invention relates generally to gaming systems and in particular the invention provides a distributed gaming system in which the game program is split over a public communications system.

### **Background of the Invention**

Traditional casinos require the patron to be in attendance at the casino in order to participate in the games provided, whether the game that the patron wished to play was a table game such as roulette, a card game such as poker or a slot machine game.

More recently there have been one or two instances of cyber casinos accessible over the internet or other publicly accessible communications networks in which video versions of traditional slot games (and other casino games?) have been available to internet users. These cyber casinos are wholly located on a single web site operated in an unregulated jurisdiction and therefore provide limited facilities and questionable security for the user.

### **Summary of the Invention**

According to a first aspect, the present invention provides a distributed gaming system, including a user terminal at a first location, a management server at a second location, at least one casino system at a third location, a public communication system enabling connection of the user terminal to the management server and a private communications system enabling connection of the management system and the casino system wherein the management server is arranged to register the user of the user terminal, establish a player account, enable the deposit of funds into the player account, manage the transfer of funds between the player account and the casino and to offer the user a selection of games or casino systems to be played from the user terminal.

Preferably, the communications system includes an internet connection between the user terminal and the management server.

Preferably also, the management server includes registration system arranged to record user details and enable access of the user terminal to the casino system. The registration system preferably also holds user account information including an account balance representing funds held by the operator of the registration system on behalf of the user and which the user may wager in games provided on the system. The registration system is also

preferably arranged to perform transaction with a financial institution to transfer funds between the user's account at the financial institution and the user's account in the registration system.

5 In the preferred embodiment, the management server appears as a web site on the internet, providing an entry point into the gaming system. The registration system is a proxy server which mirrors the management server and provides the necessary security barriers between the user terminal and the management server. The casino system is implemented on a further web server which provides and runs the games selected by the user, and receives transfers of credits from the player account on the management server in payment for wagers placed by the user and pays credits to the user account on the management server to pay out wins achieved by the user.

The casino server will also preferably incorporate a proxy server to provide security between the internet and the gaming operations.

5 The casino will run at least that part of each game which determines wins and losses and which determines the screens to be displayed. however, some parts of the game, such as graphics generation might be provided on one of the other servers or on the user terminal to reduce network traffic and speed up the game. The casino server will also preferably provide an interface to a backend system providing accounting functions for the casino including player accounts, casino receipts and government taxes and licence fees.

#### **Brief Description of the Drawings**

25 A preferred embodiment of the invention will now be described, by way of example, with reference to the accompanying drawings in which:

Figure 1 shows a block schematic diagram of the distributed gaming system according to the present invention;

Figure 2 is an information flow diagram showing the logical interconnections of the system of Figure 1;

30 Figure 3 shows a simplified block schematic for a multiplayer card game; and

Figure 4 shows an example of a user terminal screen for a game of cyber poker.

### **Detailed Description of the Preferred Embodiments**

Referring to Figures 1 and 2, the preferred embodiment of the present invention provides a distributed gaming system, accessible by a user operating a personal computer 11 having a communications device such as a modem for communication with the internet 29 and giving the user of the terminal 11 access to a variety of internet services including the gaming system of the present invention.

The gaming system comprises at least two components, these being a management system and a casino system. The management system provides a gaming system web site that the user can access via the internet and which provides information about the gaming system and a directory of the games and casinos available on the system. Access to the management system server is via a proxy server which is linked to the management system server via a private communication network 32 with a secure access path 14. The proxy server is accessible from the internet and provides security functions for the gaming system effectively providing a "fire wall" between the user and the management system and between the user and the casino servers of the gaming system.

The casino servers 16, 17 and 18 are also protected by proxy servers 25 and 26 which are directly accessible from the internet by the user, however, if accessed directly, the user will only initially have access to information pages about the casino and demonstration games. Each casino server 16, 17 and 18 provides gaming and wagering functions of the casino web site and is only accessible via secure access paths 43, 46 to users who have successfully registered with the management system proxy server. However, it is possible for a user to log on to the casino web site proxy server and then ask to pay for play, in which case the user will be transferred back to the management system and connected to the management system proxy server 15, where the user will be registered and provided with access to the gaming facilities of the casino web site.

Referring to Figure 2, the logical diagram of the system is illustrated, from which it will be seen that in the normal mode of operation the user logs on to the management system web site via the internet and the proxy server, from which he can obtain various information relating to the facilities available on the system as well as other information provided by the management system operator. While on the management system web site,

the user has free access to demonstration games that do not require a commitment of funds, however, the system will periodically ask him if he wishes to pay to play, or in other words whether he wishes to access one of the casinos on the network. In the event that he chooses to access a casino, he will be connected via the proxy server 15 and the secure access path 14 to the secure functions of the management system. although this process is invisible to the user. The user will register with the system by providing his identity and financial details sufficient to allow him to access funds from his own account at a financial institution 26, such as a bank or credit provider (note: this is if he is a first time user). In the event that the user has used the system previously he will already have an account established with the management system and that account may already have funds in which case, access to the financial institution will not necessarily be required at that time. However, if the user has no funds in the management system account, or if he wishes to top up his account, then the management system will access the financial institution via secure access path 42. and establish the credentials of the user. The management system will then proceed to transfer the funds requested by the user from the financial institution into the management system account.

Having established funds in the management system, the user is then invited to select the game that he wishes to play and/or the casino at which he wishes to play. The user is given the option of selecting a particular game and then selecting a casino from the list of casinos that have that game. or, the user may select a casino at which he wishes to play and then pick one of the game available at that casino.

Once a casino has been selected, the proxy server establishes communication with that casino and provides the user with access to that casino and the games selected. The user may then choose to wager an amount of money on the selected game and commence to play that game. As the user plays the selected game, his account on the management system 12 will be debited for each play and will be credited for each win. while simultaneously, the casino will be credited for each wager and debited for each win paid. Within the game, the user will have the option of quitting at any time, if he wishes to change games or casinos or if he wishes to cease playing altogether. The system will also prompt the user from time to time

by giving him an indication of his current available funds and asking if he wishes to quit or move.

The games provided by each casino are video games which mirror the games physically available in the casino and which the casino is licensed to operate, and therefore in each particular casino the games would include cyber versions of each of the slot machine games available in that casino, however, it is also possible for the casino server to run cyber versions of other table and card games such as; blackjack, roulette and poker, in which case it is also possible for players entering the casino via the internet to play against other interested users in for example, a cyber poker game.

Referring to Figure 3, in the event that a cyber poker game was established, each user 61, 62, 63, 64, 65 is connected via the internet management system to the casino 72 and can select a table at which he wished to play, with a limit to the number of players who can play on each table. The casino server 72 then deals a hand to each player in simulating a normal card game. Players might also nominate the variation which is to be played for each hand, as is often the case in a physical poker game, where each player in turn, has the opportunity of nominating the type of game in successive hands of the game.

In an extended form of the poker game described above, players may be allowed to communicate with one another, by voice and video communication, such that if each player had a video camera 66, 67, 68, 69, 70 mounted to their respective terminal 61, 62, 63, 64, 65, each player could then watch the other player at his table in sub-windows 81, 82, 83, 84 provided on his screen 80 (refer to Figure 4) along with other information about the hand being played such as the number of cards drawn 85 by each player, their current bet 86 and the users current hand 87. The screen will also include more operator control buttons 88-96 for indicating the players choices when playing. In low stakes games it might be optional that the player have a video camera 61, 62, 63, 64, 65 on his terminal, whereas, in high stakes games it might be mandatory that the player be visible to his opponents, in order to add the human element to the game.

Casinos can also include cameras 73 (28 in Figure 2) connected to the casino server 72 (19, 20, 21 in Figure 2), such that the user may get a view of activity within the casino while he is playing even single user games, such that he is given a feel for the ambience of the casino as he plays.

Referring back to figure 1 the casino servers 16, 17 and the proxy servers 25, 26 are also connected to the casino management systems 22, 27 in a similar manner to physical machines 23, 24 and 30, 31 within the casino, such that all takings and payouts of the casino are accounted for in a manner that meets the requirements of the local licensing authorities.

5 It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to  
10 be considered in all respects as illustrative and not restrictive.



**THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:**

1. A distributed gaming system, including a user terminal at a first location, a management server at a second location, at least one casino system at a third location, a public communication system enabling  
5 connection of the user terminal to the management server and a private communications system enabling connection of the management system and the casino system wherein the management server is arranged to register a user of the user terminal, establish a player account, enable the deposit of funds into the player account, manage the transfer of funds between the  
10 player account and the casino and to offer the user a selection of games or casino systems to be played from the user terminal.
2. The distributed gaming system of claim 1, wherein the communications system includes an internet connection between the user terminal and the management server.
- 15 3. The distributed gaming system of claim 1 or 2, wherein the management server includes registration system arranged to record user details and enable access of the user terminal to the casino system.
4. The distributed gaming system of claim 3, wherein the registration system holds user account information including an account balance of a  
20 user account representing funds held by the operator of the registration system on behalf of the user and which the user may wager in games provided on the system.
5. The distributed gaming system of claim 4, wherein the registration system is arranged to perform transactions with a financial institution to  
25 transfer funds between a user's account at the financial institution and the user account in the registration system.
6. The distributed gaming system as claimed in any one of the preceding claims, wherein the management server appears as a web site on the internet, providing an entry point into the gaming system.
- 30 7. The distributed gaming system of claim 3, 4, 5 or 6, wherein the registration system is implemented on a proxy server which mirrors the management server and provides a security barrier between the user terminal and the management server.
8. The distributed gaming system as claimed in any one of the  
35 preceding claims, wherein the casino system is implemented on a web server which provides and runs the games selected by the user, and receives

transfers of credits from the player account on the management server in payment for wagers placed by the user and pays credits to the user account on the management server to pay out wins achieved by the user.

5 9. The distributed gaming system of claim 8, wherein the casino server incorporates a proxy server to provide security between the internet and the gaming operations.

10 10. The distributed gaming system as claimed in any one of the preceding claims, wherein the casino system runs at least that part of each game which determines wins and losses and which determines the screens to be displayed.

11. The distributed gaming system of claim 10, wherein some parts of the game are provided on another server or on the user terminal.

15 12. The distributed gaming system as claimed in any one of the preceding claims, wherein the casino system provides an interface to a backend system providing accounting functions for the casino including player accounts, casino receipts and government taxes and licence fees.

13. A distributed gaming system, substantially as hereinbefore described with reference to the accompanying drawings.

Dated this eleventh day of December 1997

ARISTOCRAT LEISURE INDUSTRIES  
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Patent Attorneys for the Applicant:

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### ABSTRACT

A distributed gaming system is provided, which is accessible by a user operating a personal computer 11 having a communications device such as a modem for communication with the internet 29 and giving the user of the terminal 11 access to a gaming system.

5       The gaming system comprises at least two components. i) a management system and ii) a casino system. The management system provides a gaming system web site that the user can access via the internet and which provides information about the gaming system and a directory of the games and casinos available on the system. Access to the management  
10       system server is via a proxy server which is linked to the management system server via a private communication network 32 with a secure access path 14. The proxy server is accessible from the internet and provides security functions for the gaming system effectively providing a "fire wall" between  
15       the user and the management system and between the user and the casino servers of the gaming system.

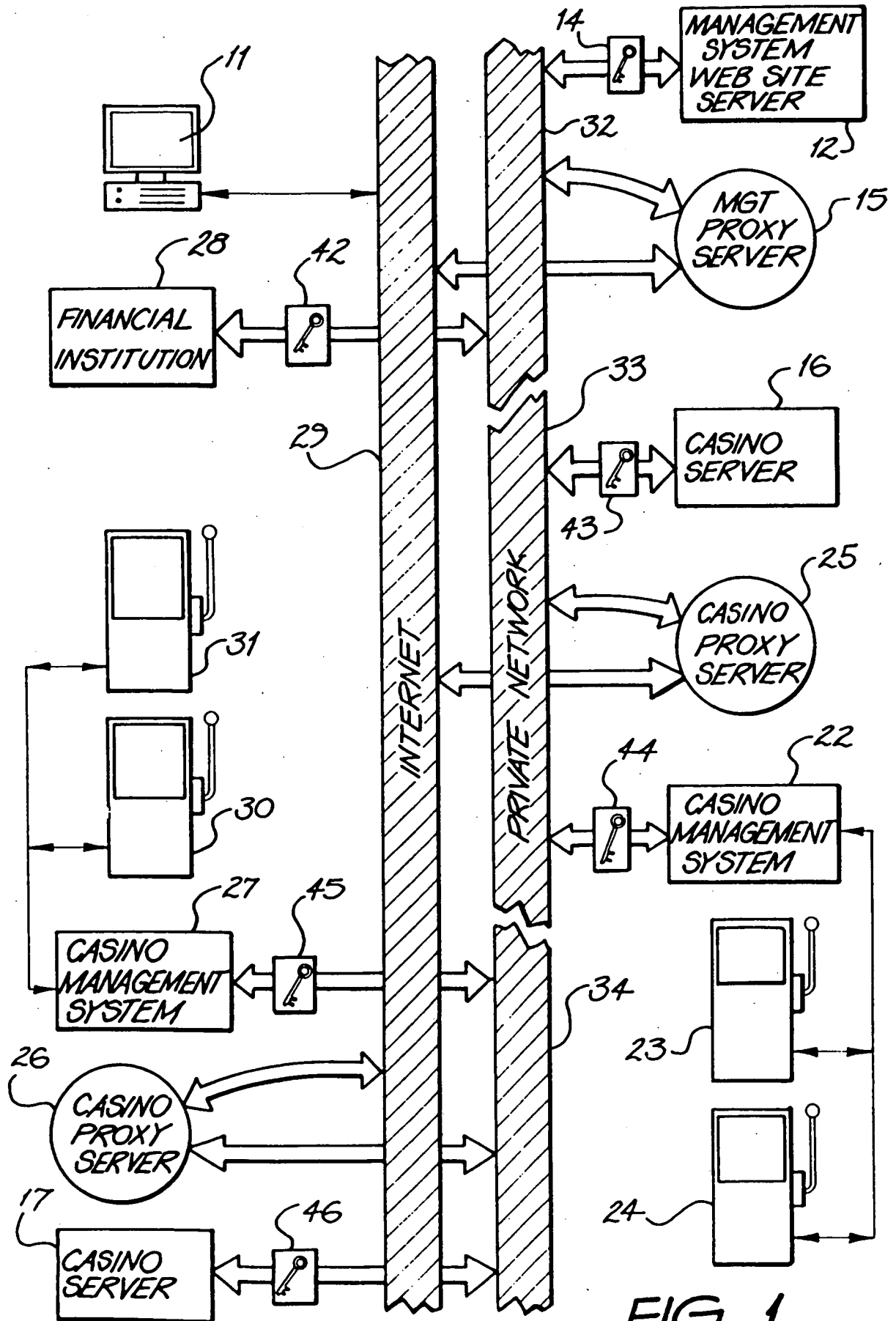


FIG. 1

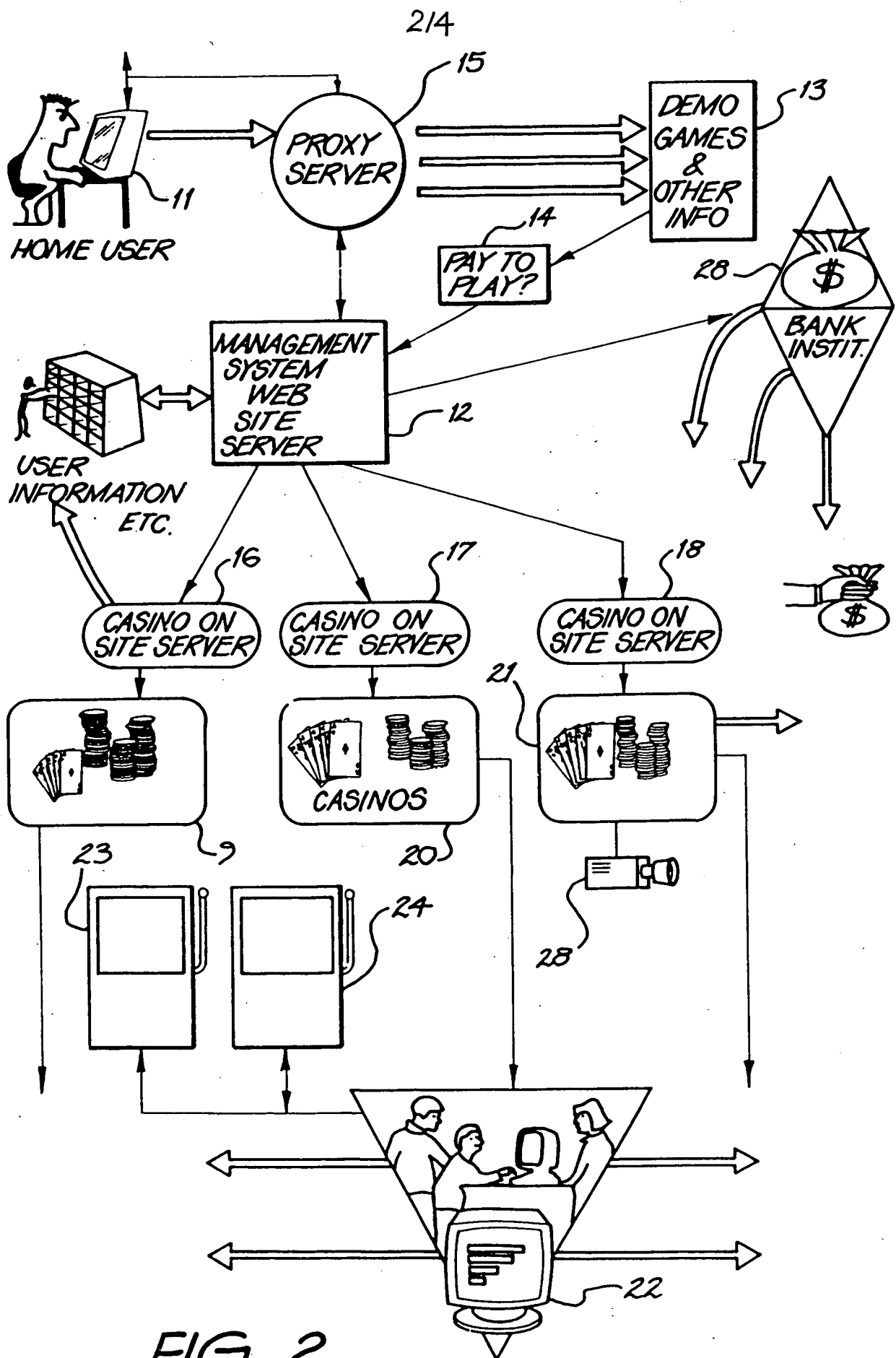


FIG. 2

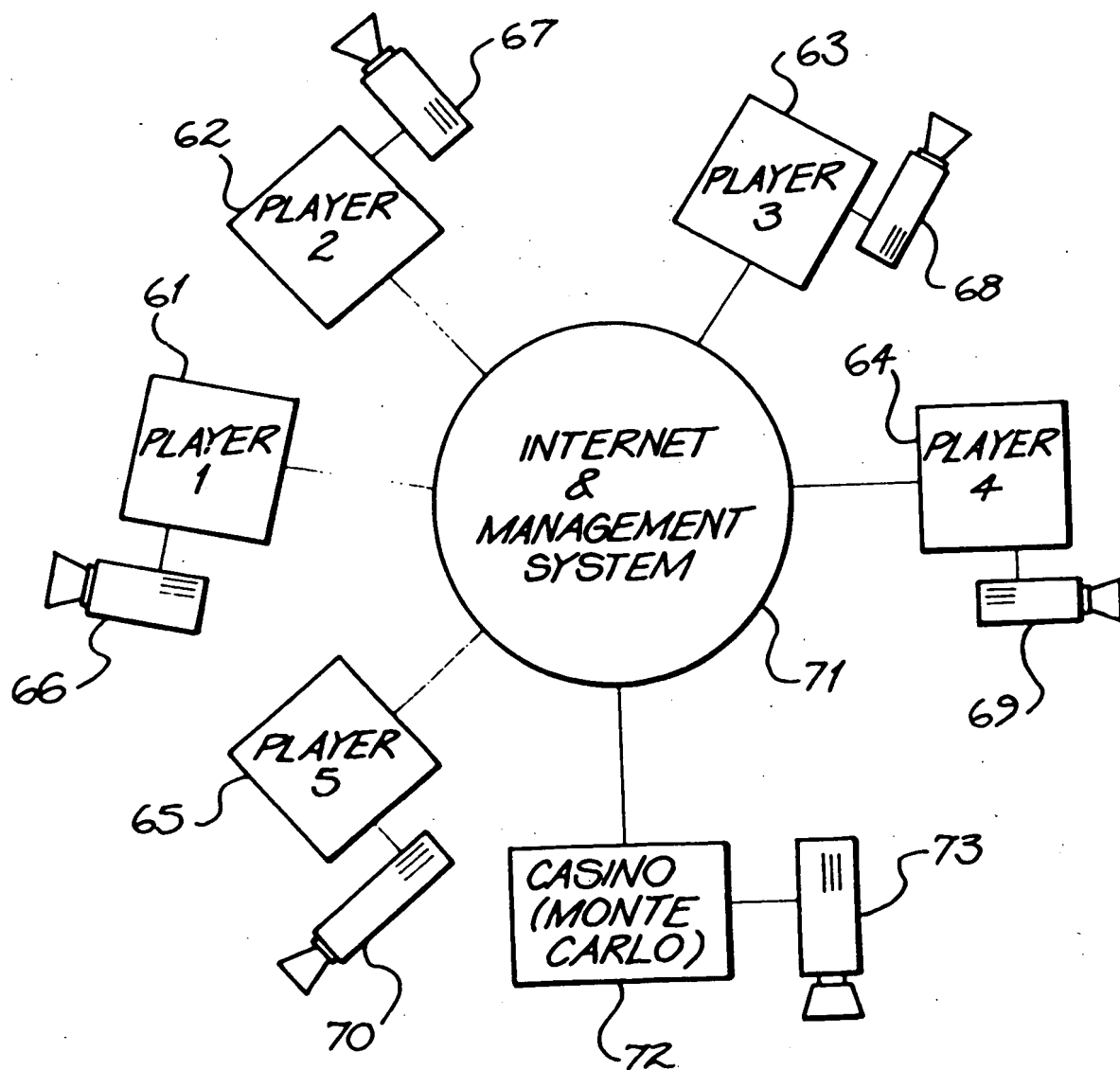


FIG. 3

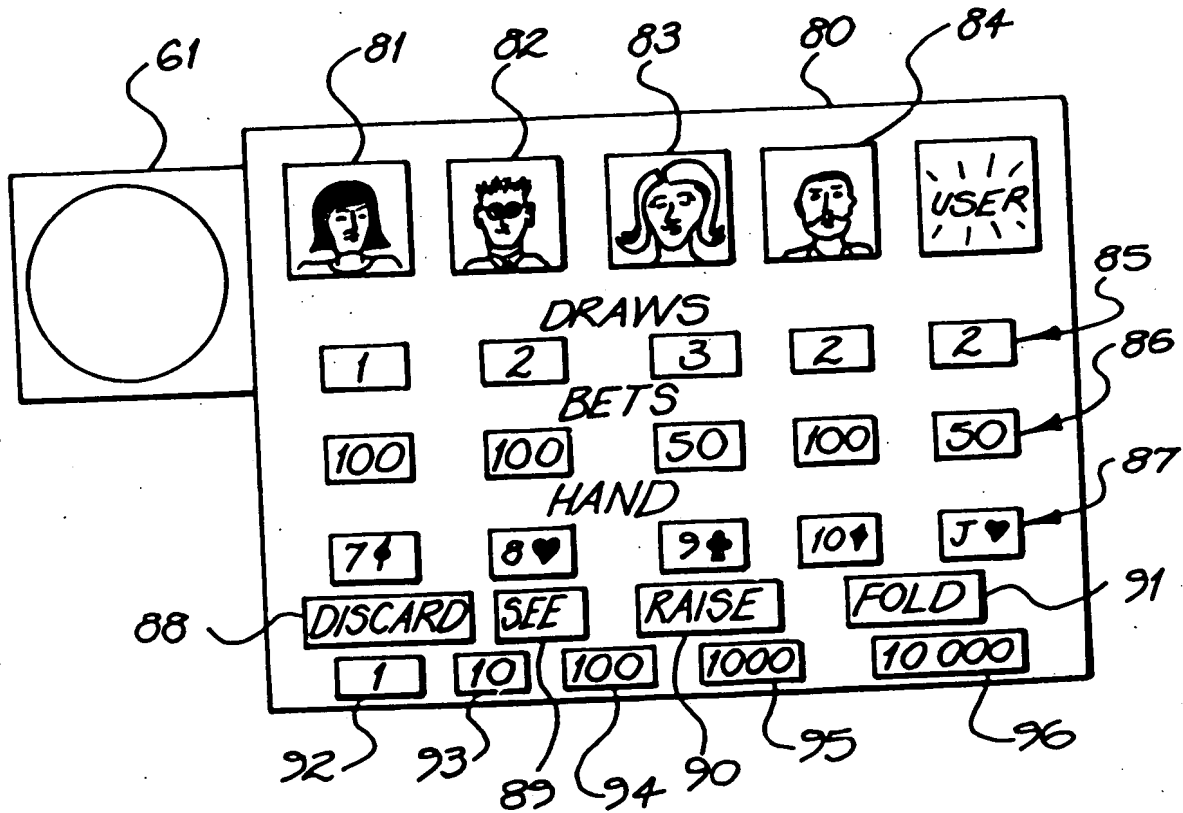


FIG. 4

**The Commissioner of Patents**

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**PATENTS**

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**AUSTRALIA**

*Patents Act 1990*

**PATENT REQUEST: STANDARD PATENT**

We, ARISTOCRAT LEISURE INDUSTRIES PTY LTD being the person(s) identified below as the Applicant, request the grant of a standard patent to the person identified below as the Nominated Person, for an invention described in the accompanying complete specification.

Full application details follow.

Applicant and Nominated Person & Address:	ARISTOCRAT LEISURE INDUSTRIES PTY LTD. A.C.N. 001 660 715 of 85-113 Dunning Avenue, Rosebery, New South Wales. 2018
Invention Title:	Distributed gaming system
Name(s) of Actual Inventor(s):	Roxanne COSTELLO
Address for Service in Australia:	F B RICE & CO 28A Montague St BALMAIN NSW 2041
Attorney Code: RI	

**ASSOCIATED PROVISIONAL APPLICATION(S) DETAILS**

Application Number(s) and Date(s): PO4331: filed 23 January 1996

Drawing number recommended to accompany the abstract: Fig 1

Dated this eleventh day of December 1997

ARISTOCRAT LEISURE INDUSTRIES  
PTY LTD

By: 

CHRIS OWENS  
Registered Patent Attorney



729-2

**AUSTRALIA**  
**Patents Act 1990**

P/00/008  
Section 20(1)  
Regulation 3.1(2)

**NOTICE OF ENTITLEMENT**  
(To be filed before acceptance)

I, **HAROLD MARK HASTINGS AINSWORTH**

being authorised by **ARISTOCRAT LEISURE INDUSTRIES PTY LTD**  
of **85-113 Dunning Avenue, Rosebery, New South Wales, 2018**,

the applicant in respect of an application for a patent for an invention entitled  
**"Distributed gaming system"**

filed under Australian Application No **48323/97**, state the following:-

The person nominated for the grant of the patent has, for the following reasons, gained entitlement from the actual inventor(s):-

The nominated person would, on the grant of a patent for the invention, be entitled to have the patent assigned to the nominated person(s).

The person nominated for the grant of the patent is the applicant of the provisional application(s) listed on the Patent Request Form.

Signed:  Date: **10th Dec 97**

Status: **DIRECTOR**